

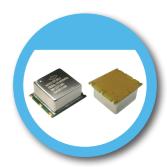
25.4 x 22.1 Oven Controlled **Crystal Oscillator - NJ Type**

FEATURE

- Dimension 25.4 x 22.1 x 11.0 mm typical.
- SC Cut Crystal.
- High stability; Low Phase Noise.
- Packing: 40pcs/Box, 5 Box/Carton, 200pcs /Carton

TYPICAL APPLICATION

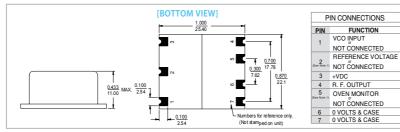
- SDH/SONET, Telecommunication base station
- Test and measurement equipment
- Aerospace
- Synthesizer, Digital switch, Reference Timing Circuit



RoHS Compliant Standard

DIMENSION

SOLDER PAD LAYOUT



ELECTRICAL SPECIFICATION

Parameter		Min.	Nominal	Max.	Unit	Test Condition
Output	Frequency		10		MHz	
	Wave Form		CMOS			
Level "1" Level "0"		2.4			V	
				0.4		
Load			15		pF	
Spurious				-70	dBc	
Frequency Stabilit	Frequency Stability					
Ambient				±30	ppb	Referenced to +25°C
Operating Temperature		0		+70	°C	
Aging						
At time of shipment After indefinite storage - Daily - Yearly				±1.0	ppb	
				±1.0		After 30 days
				±100		
	- 10 years			±350		
Voltage Warm-up				±10		±5% Change
				±20	1	In 5 minutes@ +25°C (Referenced to 1 Hour)
Phase Noise	Phase Noise @ 10 MHz			-115		@ 10Hz
				-135	dBc	@ 100Hz
				-140		@ 1KHz
				-140		@ 10KHz
Electrical Frequency Adjustment						
	Range	0.4		1.0	±ppm	
	Control	0.0		2.8	V	
Slope			Positive			
	Center	1.0	1.4	1.8	V	Control Voltage at which nominal Frequency occurs at time of shipment
	Input impedance	100			ΚΩ	
Input Power	Voltage	3.14	3.3	3.46	V	
	Current			3.0		@ turn on
	Steady state			1.0	W	@ 25°C
Reference Voltage Voltage		2.72	2.8	2.88	V	Optional 4.0V (Note1), 5.0V (Note2)
	Load	9.0		∞	ΚΩ	
Temperature Stability				±0.01	VDC	

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

Note 1: For all +5.0V input power units. Note2: For all +12V input power units.

Available Frequency Range: 5MHz to 40 MHz including 5.0, 10.0, 16.384, 19.44, 24.576 and 32.768 MHz

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±3	±5	±10
0 ~ +70	0	0	0
-20 ~ +70	Δ	0	0
-40 ~ +85	X	Δ	0

^{* ○:} Available △: Conditional X: Not available

^{*}All aging stabilities are after storage of up to 1 year and apply after 30 days of continuous operation.

The daily aging rate also applies at the time of shipment from factory.

*The Electrical Frequency Adjustment Range is sufficient for the life of the oscillator. Specification subject to change with frequency.